REMARKS

In response to the non-final office action of January 26, 2005, applicant asks that all claims be allowed in view of the following remarks. Claims 1-17 are pending, with claims 1 and 2 being independent. In this amendment, claims 1 and 2 are being amended, and claims 3-17 are being added. Support for these amendments may be found in the application at, for example, page 3, line 4 to page 4, line 13, and FIGS. 2 and 3. No new matter has been introduced.

Claims 1 and 2 were rejected under 35 U.S.C. § 103 as being unpatentable over Maccabee (U.S. Patent No. 5,646,907) in view of DiMarzio (U.S. Patent No. 6,069,843). Applicant requests reconsideration and withdrawal of the rejection because Maccabee, DiMarzio or the proper combination of the references do not describe or suggest detecting electromagnetic signals associated with the vibrations.

Amended claim 1 recites a system for detecting a mine. The system includes a frequency-stepped radar configured to induce vibrations in a landmine using different frequencies; a sensor configured to detect electromagnetic signals associated with the vibrations; and a processor configured to process the signals to detect the landmine.[1]

Maccabee discloses techniques for detecting mines in water based on receiving and processing an acoustic signal. For example, Maccabee states:

> Underwater acoustic detector 14 is configured to detect underwater sound such as acoustic returns.... In general, detector 14 receives underwater sound and converts same to an electrical signal representation thereof for input to processor 16.... If certain types of objects are of concern, e.g., mines, icebergs, etc., processor 16 could be programmed to specifically look for acoustic returns having signatures indicative of such objects that are expected to be at or just below surface 200. The acoustic return signatures can be analyzed.

Maccabee at col. 3, lines 34-60. See e.g., Maccabee at Abstract (stating "[a]coustic energy under the water's surface is monitored for any acoustic return that may be generated in the water as a result of a beam" that is "directed at through the air towards the water's surface."). Nor does the rejection contend otherwise. In particular, the rejection states that Maccabee monitors

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[1] The underlined portion was added by this amendment, and, naturally, was not addressed by the Office action.

acoustic vibrations to detect mines. See Office action of January 26, 2005 at page 1, lines 9-13 (stating "[t]he Maccabee reference discloses ... monitoring acoustic vibrations to detect mines" and citing col. 3, line 53). In sum, Maccabee does not describe or suggest detecting electromagnetic signals associated with the vibrations, as recited in amended claim 1.

The rejection relies on DiMarzio as disclosing "a system that transmits laser (see abstract) pulses and monitors acoustic vibrations to detect landmines." However, DiMarzio's system does not cure Maccabee's failure to describe or suggest detecting electromagnetic signals associated with the vibrations, as recited in amended claim 1. Rather, DiMarzio discloses techniques for detecting underground objects by using a pulsed laser to generate acoustic waves in soil, using a microphone to detect an acoustic signal, and processing the detected acoustic signal to determine the shape of an underground object. See e.g., DiMarzio at Abstract and col. 2, lines 55-64 and col. 3, lines 9-21. DiMarzio does not describe or suggest detecting electromagnetic signals associated with the vibrations, as recited in amended claim 1. Nor does the rejection assert that DiMarzio does so. See Office action of January 26, 2005 at page 1, lines 14-16 (stating DiMarzio "monitors acoustic vibrations to detect landmines").

Accordingly, neither Maccabee, DiMarzio nor any proper combination of the references describes or suggests detecting electromagnetic signals associated with the vibrations, as recited in amended claim 1. For at least these reasons, applicant respectfully requests reconsideration and withdrawal of the rejection of claim 1.

Amended independent claim 2 recites detecting electromagnetic signals associated with the vibrations. Accordingly, for at least the reasons described above with respect to claim 1, applicant requests reconsideration and withdrawal the rejection of independent claim 2.

Each of claims 3-17 depends from independent claims 1 or 2. At least for the reason of that dependency and the reasons noted above with respect to independent claims 1 and 2, applicant submits that claims 3-17 are allowable.

It is believed that all of the pending issues have been addressed. However, the absence of a reply to a specific rejection, issue or comment does not signify agreement with or concession of that rejection, issue or comment. In addition, because the arguments made above may not be exhaustive, there may be reasons for patentability of any or all pending claims (or other claims) that have not been expressed. Finally, nothing in this reply should be construed as an intent to

concede any issue with regard to any claim, except as specifically stated in this reply, and the amendment of any claim does not necessarily signify concession of unpatentability of the claim prior to its amendment.

No fee is believed due. Please apply any charges or credits to deposit account 06-1050.

Respectfully submitted,

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